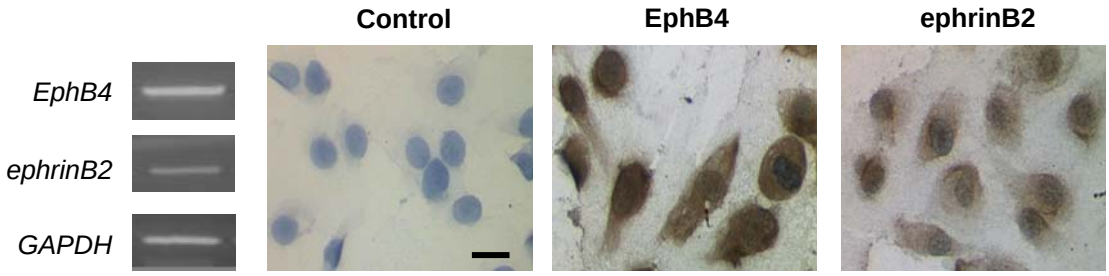
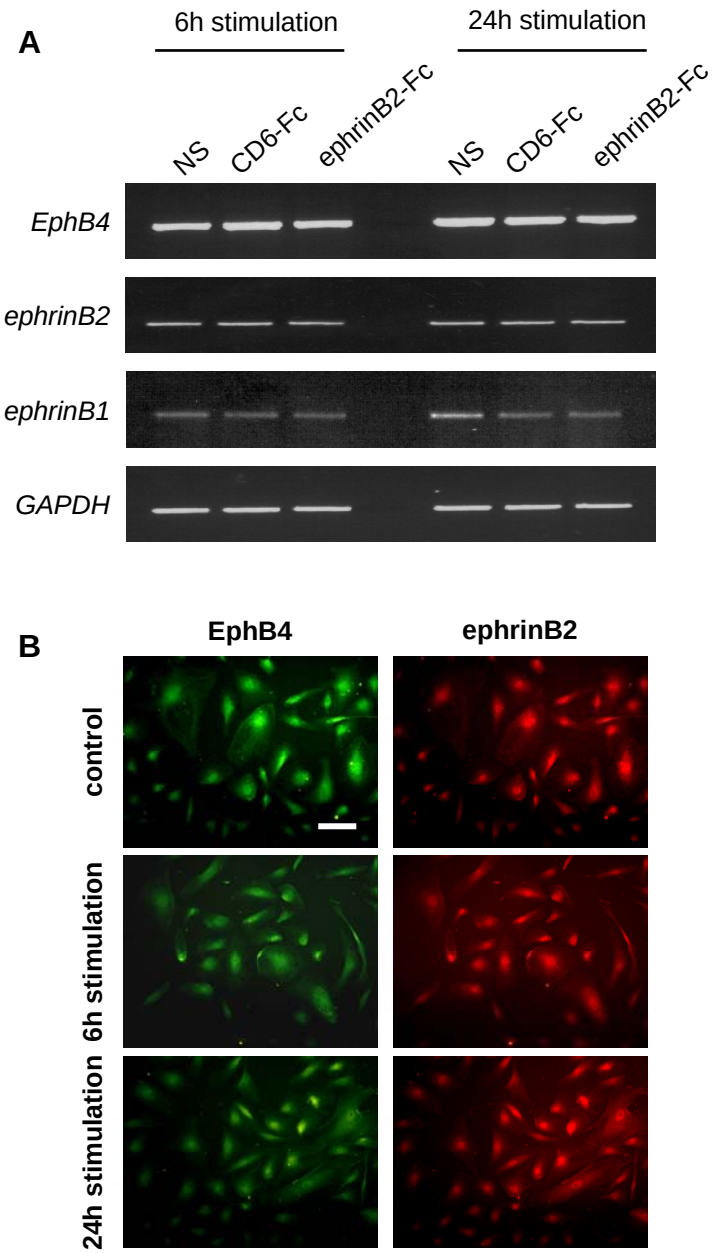
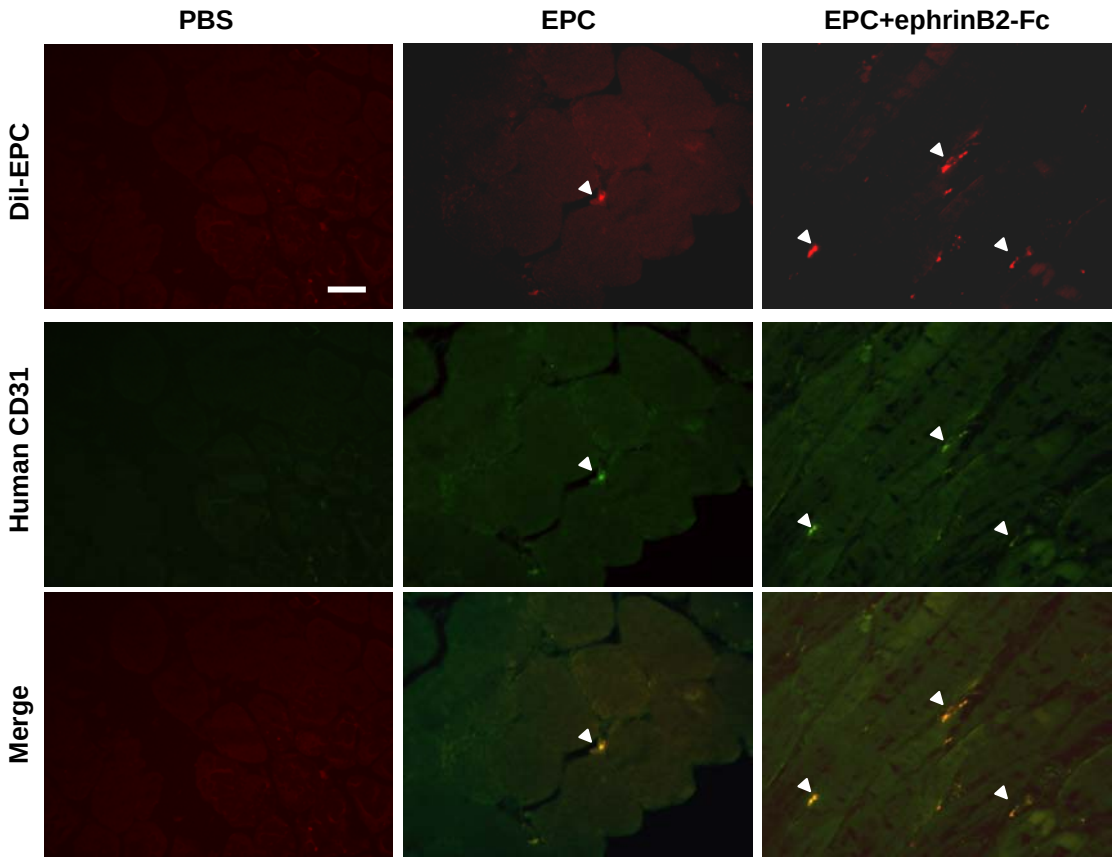
Supplementary Figure 1



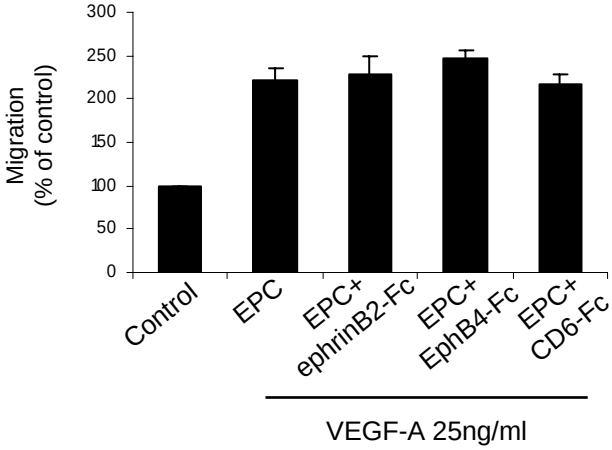
Supplementary Figure 2



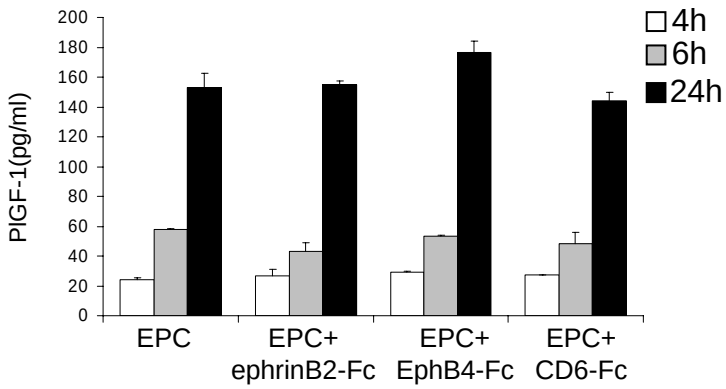
Supplementary Figure 3



Supplementary Figure 4



Supplementary Figure 5



Legend to supplementary figures

Supplementary Figure 1

EphB4 and ephrin-B2 expression on EPCs.

RT-PCR and immunocytochemical analysis of EphB4 and ephrin-B2 expression. Glyceraldehyde-3-phosphate deshydrogenase (GAPDH) served as control for PCR. For immunocytochemistry the control used was an isotypic IgG. Scale bar: 10 μm

Supplementary Figure 2

EphB4 and ephrin-B2 expression in ephrin-B2-Fc-stimulated EPCs.

EPCs were treated with ephrin-B2-Fc (3μg/ml) for 6h or 24h. RT-PCR (**A**) and immunofluorescence studies (**B**) were performed to analyse EphB4 and ephrin-B2 expression. GAPDH was used as a loading control. Ephrin-B1 was included because it is not an arterial or venous marker. Scale bar: 20 μm

Supplementary Figure 3

Detection of EPCs in ischemic muscle.

EPCs were labeled with CM-Dil and then pre-treated 3 μg/ml ephrin-B2-Fc before injection. The gastrocnemius muscles were harvested 4 days after injection of the labeled EPCs. To demonstrate the human origin of the incorporated labeled cells, tissue sections were processed for immunocytochemistry with a biotinylated mouse anti-human CD31 antibody. Dil-positive cells appear in red and CD31-positive cells in green, with co-localization (Merge) revealed by the yellow color. Tissue sections were examined using confocal microscopy. Arrows indicate labeled EPCs. Scale bar: 20 μm.

Supplementary Figure 4

EPC migration toward VEGF-A.

Migration was assessed using a modified Boyden chamber system. EPCs were either stimulated or left un-stimulated and then seeded on the upper chamber. VEGF-A was added to the lower chamber. Results were expressed as % of control EPC without VEGF-A.

Supplementary Figure 5

ELISA detection of PlGF-1 in EPC-conditioned media.

Equal numbers of EPCs were seeded in culture plates and conditioned media were harvested at various times for ELISA quantification.